



101 021 566

CofC

PTO/SB/21 (05-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/021,566 U.S. Pat. No. 6,896,489
Filing Date	December 12, Issued: May 24, 2005
First Named Inventor	Douglas G. Hunter et al.
Art Unit	3746
Examiner Name	Charles G. Freay
Attorney Docket Number	DKT 00147A (BWI-00061)

Total Number of Pages in This Submission

**ENCLOSURES (Check all that apply)**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>Letter Requesting Certificate of Correction; Certificate of Correction (2 Pages); Return Receipt Postcard |
|---|--|--|
- Remarks**  
Applicant believes no fee to be due for the attached filing, however, should additional fees be due in order to prevent the abandonment of this patent, please consider this as authorization to charge Deposit Account No. 501612 (Warn, Hoffmann, Miller & LaLone, P.C.) for any such fees due. A duplicate copy of this document is enclosed for this purpose.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Warn, Hoffmann, Miller & LaLone, P.C. Philip R. Warn - Reg No. 32775
Signature	
Date	July 26, 2006

**Certificate  
AUG 02 2006  
of Correction****CERTIFICATE OF TRANSMISSION/MAILING**

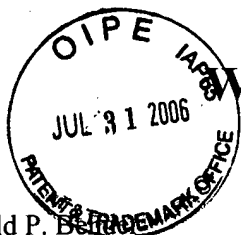
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Philip R. Warn - Reg. No. 32775		
Signature		Date	July 26, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

AUG 2 2006



LAW OFFICES

**WARN, HOFFMANN, MILLER & LALONE, P.C.**

Intellectual Property Matters  
PATENTS, TRADEMARKS AND COPYRIGHTS

Ronald P. Beitzel  
Richard W. Hoffmann  
Douglas P. LaLone  
John A. Miller  
Gregory L. Ozga  
Peter J. Rashid  
Scott P. Ryan  
Philip R. Warn

691 North Squirrel Road – Suite 140  
Auburn Hills, Michigan 48326

[www.warnhoffmann.com](http://www.warnhoffmann.com)

Telephone: (248) 364-4300  
Facsimile: (248) 364-4285

July 26, 2006

Attention Certificate of Corrections Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Patent No. 6,896,489 B2 – Issued: May 24, 2005  
Serial No. 10/021,566 - Filed: December 12, 2001  
Inventor(s): Douglas G. Hunter & Albin J. Niemiec  
Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE  
TARGET REGULATOR  
BorgWarner Reference: DKT 00147A  
Our File No. BWI-00061

Dear Sir:

We have reviewed the above-referenced patent and have found the following errors, which appear to require a Certificate of Correction:

Drawings,

Replacement drawings were submitted on November 15, 2004, but not used for the issued patent. Please replace with attached proper drawings.

Title Page,

Item [56], References Cited, FOREIGN PATENT DOCUMENTS, add

-- DE 38 40 909	6/1989
DE 39 25 249	3/1990
DE 42 42 871	6/1994
DE 101 41 786	3/2003
DE 44 44 819	6/1996
DE 101 44 693	3/2003 --.

Column 8,

Line 39, "passages 139 blind bore 132" should be --passages 139, blind bore 132--.

Column 11,

Line 40, Claim 3, "wherein said" should be --wherein the said--.

Hon. Commissioner of Patents & Trademarks  
July 26, 2006  
Page Two

Re: U.S. Patent No. 6,896,489  
Issued: May 24, 2005

Column 11,  
Line 51, Claim 7, "by seal" should be --by the seal--.

Column 12,  
Line 32, Claim 19, "of said first" should be --of the first--.

Column 12,  
Line 36, Claim 20, "in said slots" should be -- in the slots --.

Column 12,  
Line 39, Claim 21, "comprises" should be -- comprising --.

Column 13,  
Line 13, Claim 25, "fluid;" should be -- fluid circuit; --.

Column 13,  
Line 14, Claim 25, "fluid chamber form d" should be -- fluid chamber formed --.


Column 15,  
Line 33, Claim 31, "second;" should be -- second actuator; --.

Enclosed herewith is the U.S. Patent and Trademark Office Certificate of Correction form, which we request be approved for the above-referenced patent.

Applicant believes the errors listed above are Patent Office errors and, therefore, no fee is due for this Certificate of Correction. If, however, it is determined that a fee is necessary, the Commissioner is hereby authorized to charge any fees which may be required in connection with this patent to Deposit Account No. 501612 (Warn, Hoffmann, Miller & LaLone, P.C.). A duplicate copy of this letter is enclosed for this purpose.

Respectfully submitted,

WARN, HOFFMANN, MILLER & LALONE, P.C.  
Attorneys for Applicant(s)

By:   
Philip R. Warn  
Reg. No. 32775

PRW:mlb  
Enclosures

11/8 2 4000

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 2

PATENT NO. : 6,896,489  
APPLICATION NO.: 10/021,566  
ISSUE DATE : May 24, 2005  
INVENTOR(S) : Douglas G. Hunter et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**Drawings,**

Replacement drawings were submitted on November 15, 2004, but not used for the issued patent. Please replace with attached proper drawings.

**Title Page,**

Item [56], References Cited, FOREIGN PATENT DOCUMENTS, add

-- DE 38 40 909 6/1989  
DE 39 25 249 3/1990  
DE 42 42 871 6/1994  
DE 101 41 786 3/2003  
DE 44 44 819 6/1996  
DE 101 44 693 3/2003 --.

**Column 8,**

Line 39, "passages 139 blind bore 132" should be --passages 139, blind bore 132--.

**Column 11,**

Line 40, Claim 3, "wherein said" should be --wherein the said--.

**Column 11,**

Line 51, Claim 7, "by seal" should be --by the seal--.

**Column 12,**

Line 32, Claim 19, "of said first" should be --of the first--.

**Column 12,**

Line 36, Claim 20, "in said slots" should be -- in the slots --.

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

Philip R. Warn, Esq.  
Warn, Hoffmann, Miller & LaLone, P.C.  
P.O. Box 70098  
Rochester Hills, MI 48307

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

AUG 1 2005

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 2 of 2

PATENT NO. : 6,896,489  
APPLICATION NO.: 10/021,566  
ISSUE DATE : May 24, 2005  
INVENTOR(S) : Douglas G. Hunter et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 12,  
Line 39, Claim 21, "comprises" should be -- comprising --.

Column 13,  
Line 13, Claim 25, "fluid;" should be -- fluid circuit; --.

Column 13,  
Line 14, Claim 25, "fluid chamber form d" should be -- fluid chamber formed --.

Column 15,  
Line 33, Claim 31, "second;" should be -- second actuator; --.

### MAILING ADDRESS OF SENDER (Please do not use customer number below):

Philip R. Warn, Esq.  
Warn, Hoffmann, Miller & LaLone, P.C.  
P.O. Box 70098  
Rochester Hills, MI 48307

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

113 2 2105

Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE TARGET REGULATOR

Inventor(s): Douglas G. Hunter, et al.

Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

1/9

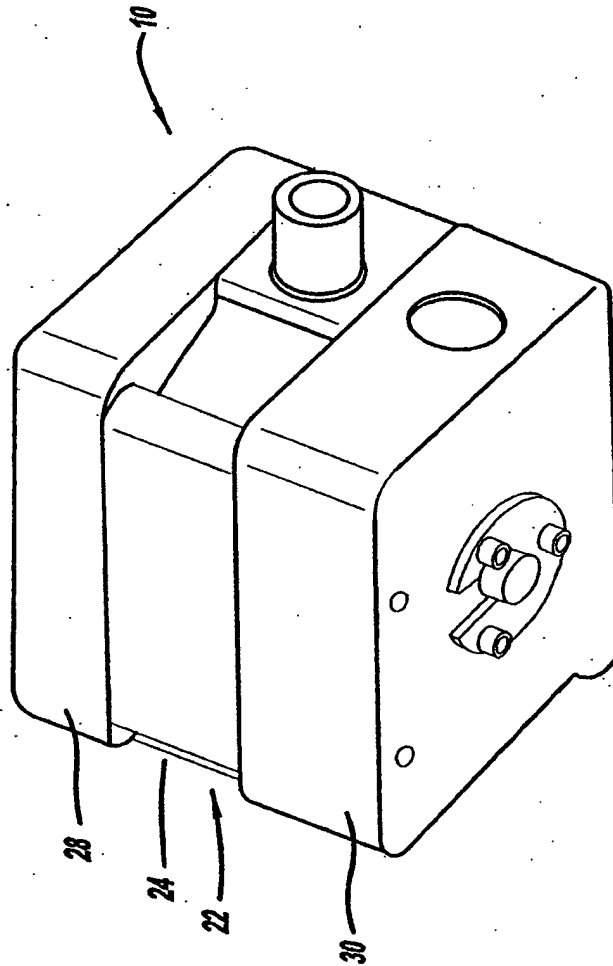


Figure - 1

11/13 8/1/06

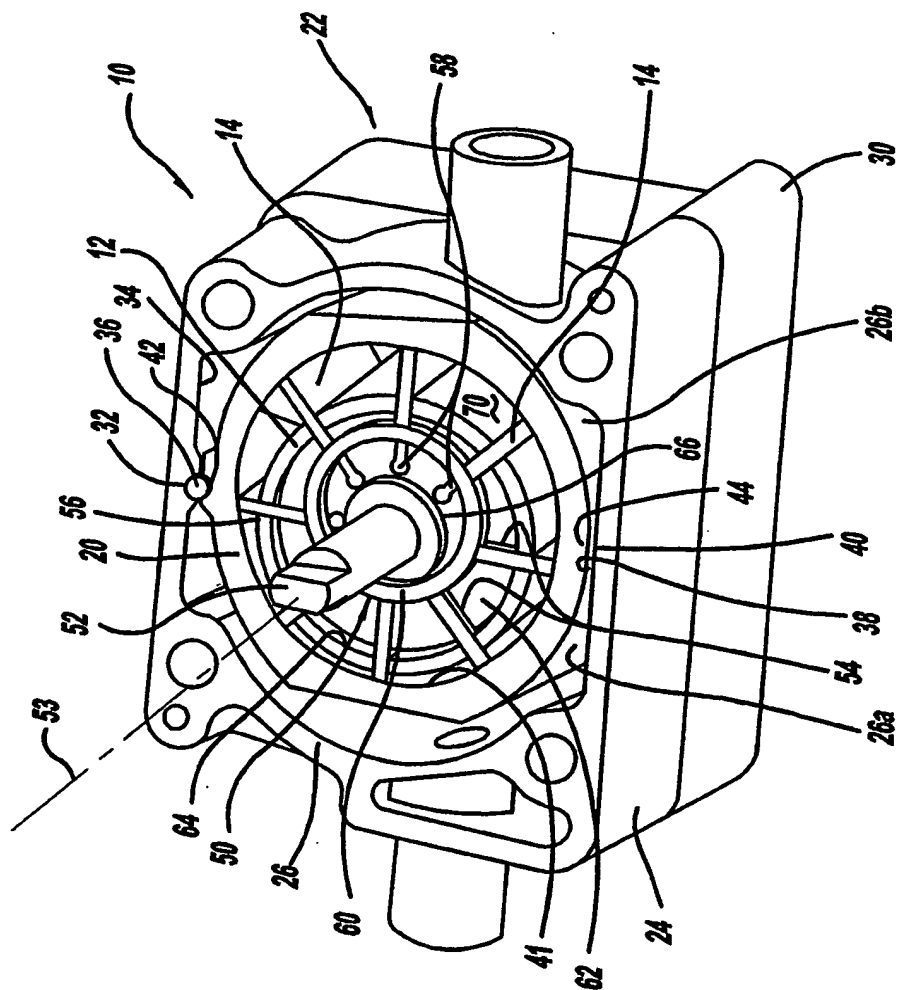
**Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE TARGET REGULATOR**

Inventor(s): Douglas G. Hunter, et al.  
Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

**2/9**

**Figure - 2**



1944

Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE TARGET REGULATOR

Inventor(s): Douglas G. Hunter, et al.

Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

3/9

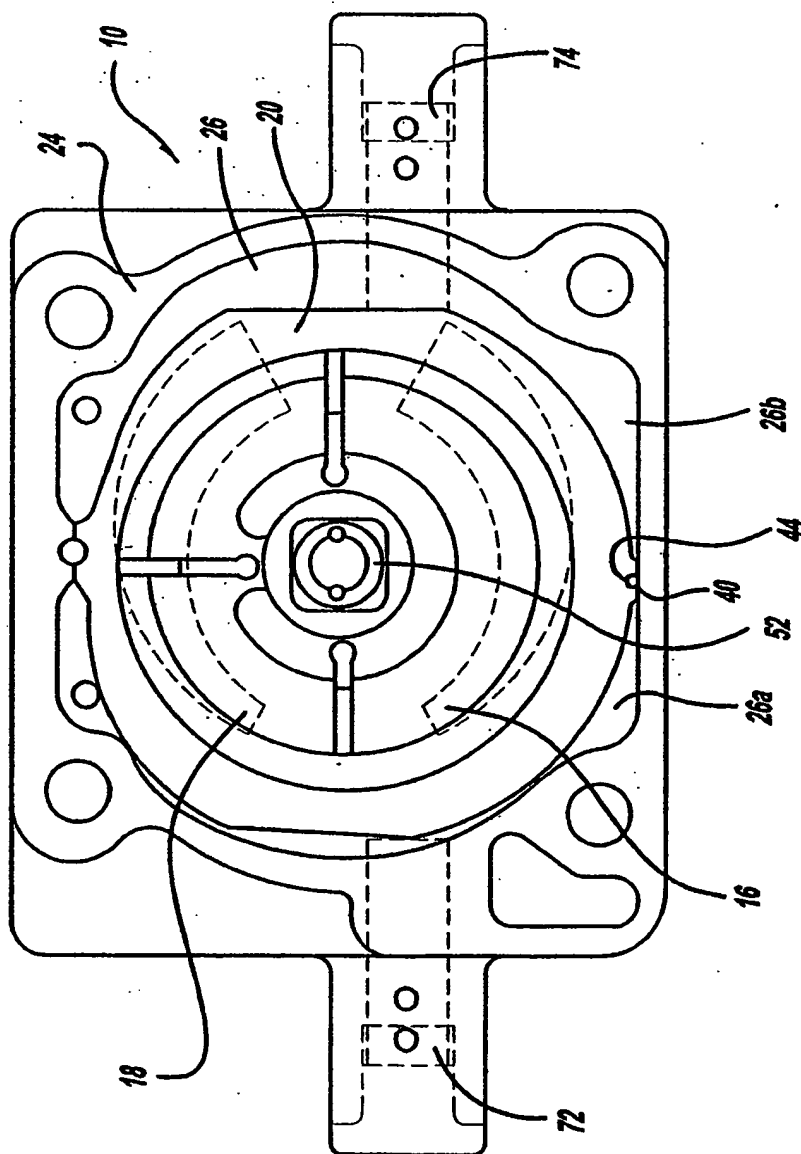


Figure - 3

AUG 2 4 00 PM '06



Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE TARGET REGULATOR

Inventor(s): Douglas G. Hunter, et al.  
Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

4/9

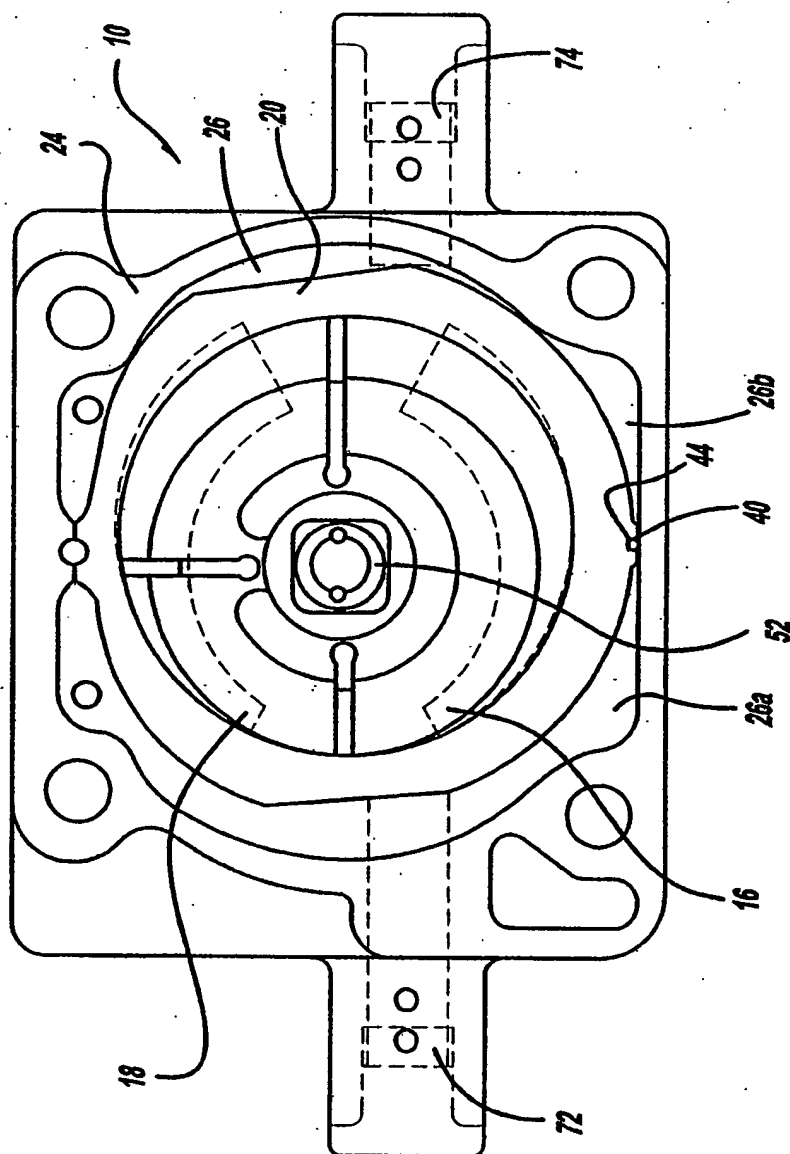


Figure - 4

AUP 2 AUP

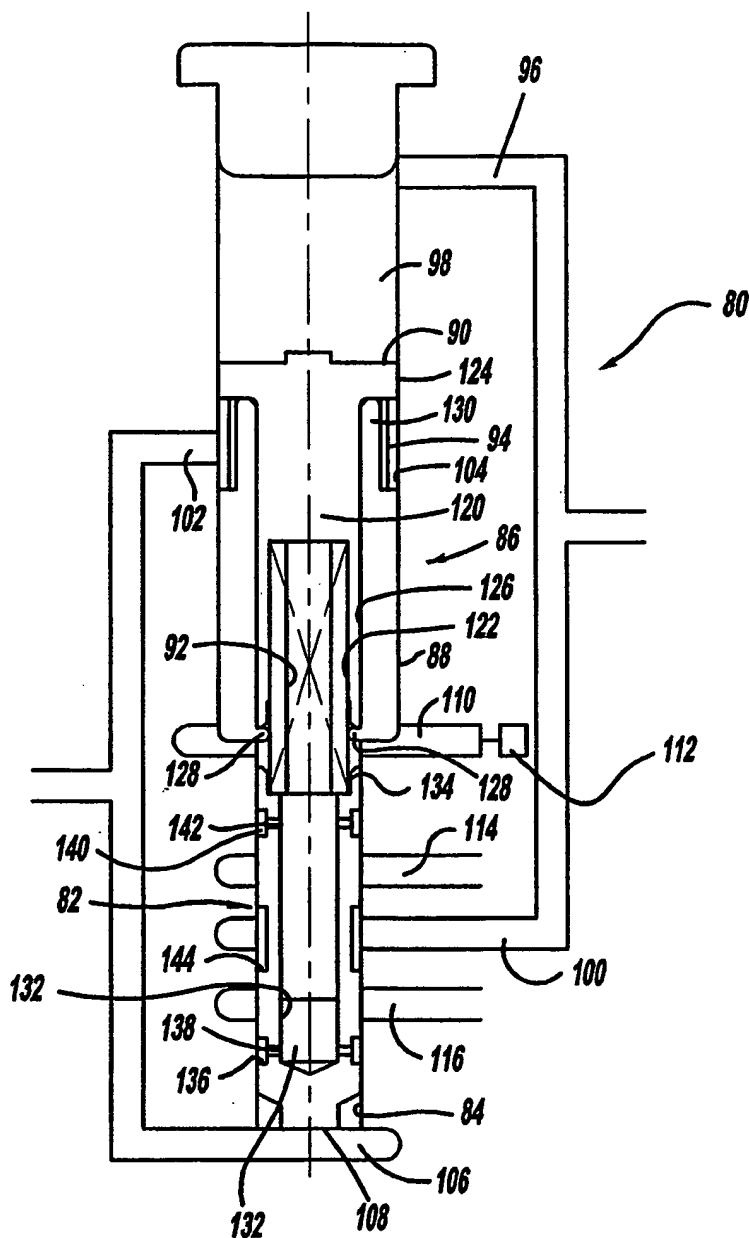


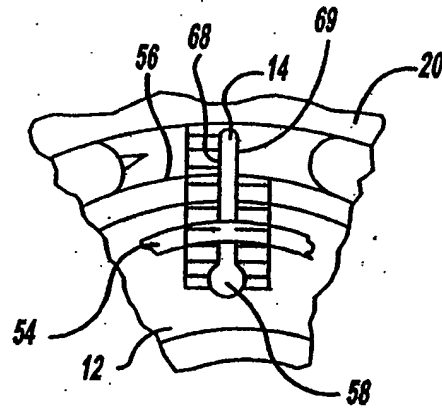
Figure - 5

APR 1992

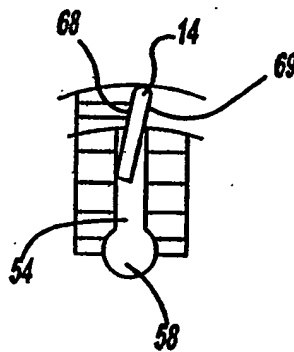
Inventor(s): Douglas G. Hunter, et al.  
Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

**6/9**



**Figure - 6**



**Figure - 7**

(REPLACEMENT SHEET)

7/9

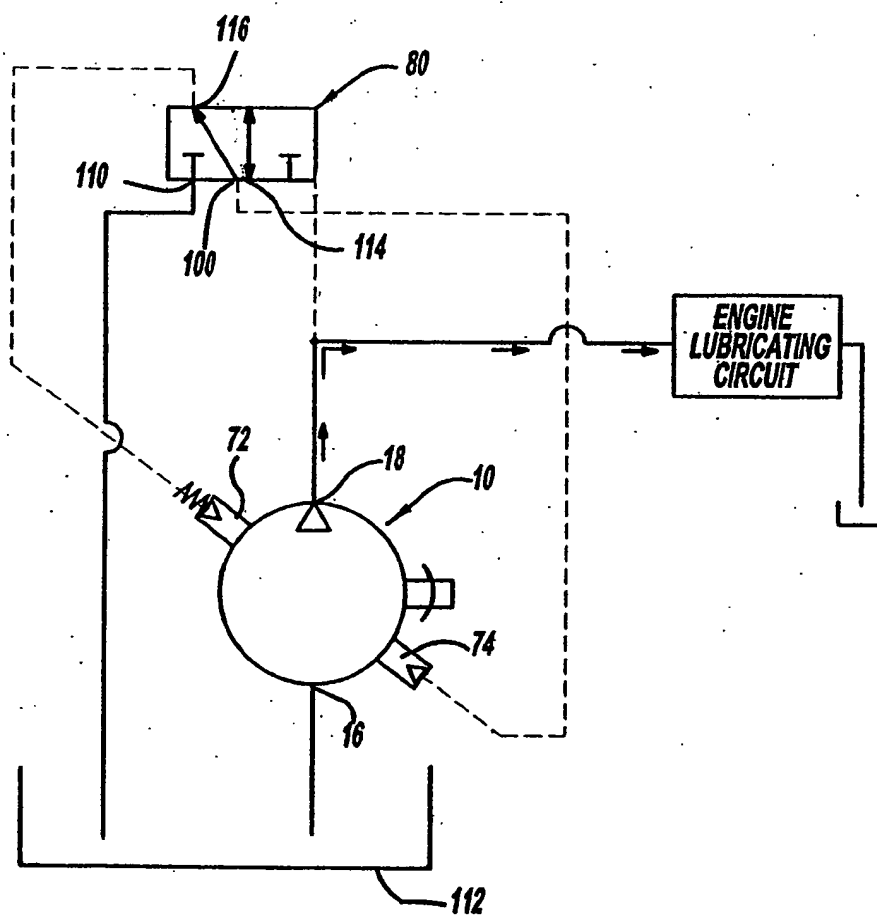


Figure - 8

Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE TARGET REGULATOR

Inventor(s): Douglas G. Hunter, et al.

Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

8/9

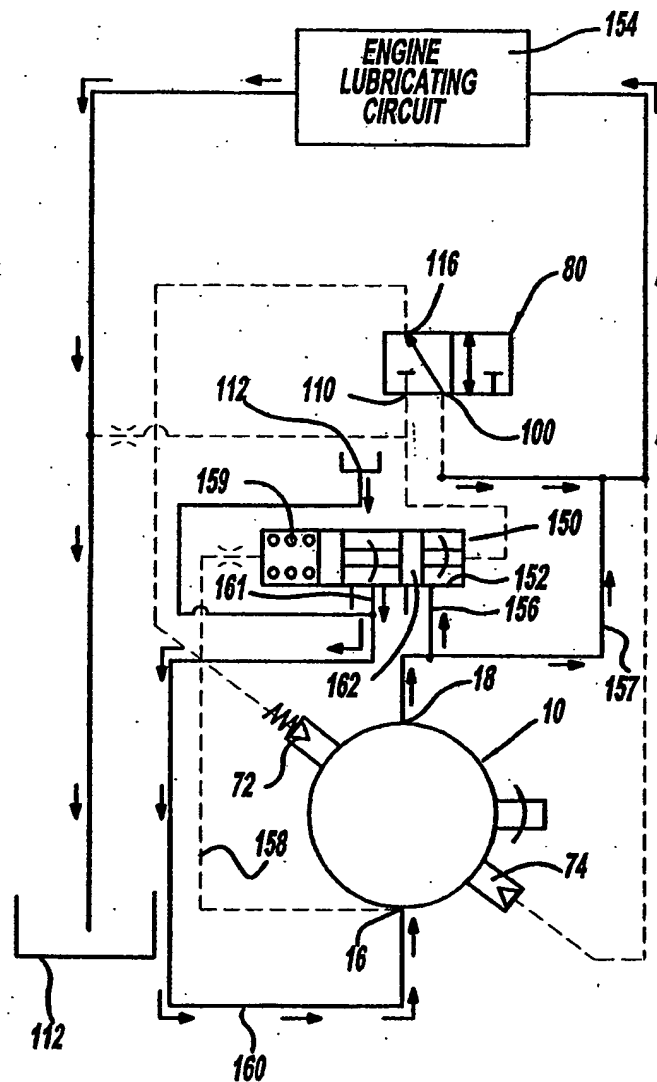


Figure - 9

Title: VARIABLE DISPLACEMENT VANE PUMP WITH VARIABLE TARGET REGULATOR

Inventor(s): Douglas G. Hunter, et al.

Attorney Docket No. DKT-00147A (BWI-00061)

(REPLACEMENT SHEET)

9/9

Figure - 10

